

Water Management

Interpretations of soils for water management are given as limitations for pond reservoir areas; embankments, dikes, and levees; excavated pond (aquifer-fed); and as restrictive features that affect drainage, irrigation, terraces and diversions, and grassed waterways.

Pond reservoir area is the area that holds water behind a dam or embankment. Soils best suited to this use have a low seepage potential, which is determined by the permeability and depth to fractured or permeable bedrock, or other permeable material.

Embankments, dikes, and levees are raised structures of soil material constructed to impound water or protect land against overflow. They generally are less than 20 feet high and are constructed of "homogeneous" soil material (without a core zone) and compacted to medium density.

Excavated ponds (aquifer-fed) are bodies of water created by excavating a pit or dugout into a ground-water aquifer. Excluded are ponds which are fed by surface runoff or that have embankments that impound water 3 feet or more above the original surface.

Drainage is the process of removing excess surface and subsurface water from agricultural land. Soil features are listed that affect grading, excavation, and stability of trench sides or ditchbanks. Features are also listed which might affect productivity after drainage is installed. The availability of drainage outlets must also be considered.

Irrigation is the controlled application of water to supplement rainfall for supporting plant growth. Soil features are listed that affect design, layout, construction, management, or performance of an irrigation system.

Terraces and diversions are embankments or a combination of an embankment and a channel constructed across a slope to control erosion by diverting or storing surface runoff instead of permitting it to flow uninterrupted down the slope. Soil features are listed that affect the construction of terraces and diversions and that may cause problems after construction.

Grassed waterways are natural or constructed channels that generally are broad and shallow and are covered with erosion-resistant grasses. They are used to conduct surface water to outlets at a nonerosive velocity. Soil features are listed that affect the construction and maintenance of the waterway, and also that affect the growth of grass after construction.

See the National Soil Survey Handbook, Part 620, for criteria used in rating specific uses.

WATER MANAGEMENT**Aroostook County Southern Part**

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Soil name and map symbol	Limitations For			Features Affecting			
	Pond Reservoir areas	Embankments ,Dikes, and Levees	Aquifer-fed Excavated Ponds	Drainage	Irrigation	Terraces and Diversions	Grassed Waterways
CgA CARIBOU	Moderate: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Favorable:	Favorable:	Favorable.:
CgB CARIBOU	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope	Favorable:	Favorable.:
CgC CARIBOU	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
CgD CARIBOU	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
CgE CARIBOU	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: slope	Limitation: slope	Limitation: slope
CnA COLTON	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, too sandy	Limitation: droughty, large stones
CnB COLTON	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, too sandy	Limitation: droughty, large stones

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CnC COLTON	Severe: seepage, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, slope, too sandy	Limitation: droughty, large stones, slope
CnD COLTON	Severe: seepage, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, slope, too sandy	Limitation: droughty, large stones, slope
CnE COLTON	Severe: seepage, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, slope, too sandy	Limitation: droughty, large stones, slope
CoA CONANT	Moderate: seepage	Severe: piping, wetness	Moderate: slow refill	Limitation: frost action	Limitation: wetness	Limitation: wetness	Limitation: wetness
CoB CONANT	Moderate: seepage, slope	Severe: piping, wetness	Moderate: slow refill	Limitation: frost action, slope	Limitation: slope, wetness	Limitation: wetness	Limitation: wetness
CoC CONANT	Severe: slope	Severe: piping, wetness	Moderate: slow refill	Limitation: frost action, slope	Limitation: slope, wetness	Limitation: slope, wetness	Limitation: slope, wetness
DaA DAIGLE	Slight:	Severe: wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: droughty, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, wetness

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	Pond Reservoir areas	Embankments ,Dikes, and Levees	Aquifer-fed Excavated Ponds	Drainage	Irrigation	Terraces and Diversions	Grassed Waterways
DaB DAIGLE	Moderate: slope	Severe: wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: droughty, slope, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, wetness
DaC DAIGLE	Severe: slope	Severe: wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: droughty, slope, wetness	Limitation: erodes easily, slope, wetness	Limitation: erodes easily, slope, wetness
GP PITS	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, fast intake	Limitation: large stones, too sandy	Limitation: droughty, large stones
Ha HADLEY	Moderate: seepage	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: erodes easily, soil blowing	Limitation: erodes easily, soil blowing	Limitation: erodes easily
HoA HOWLAND	Slight:	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: percs slowly, wetness	Limitation: percs slowly, wetness	Limitation: rooting depth, wetness
HoB HOWLAND	Moderate: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, wetness	Limitation: rooting depth, wetness
HoC HOWLAND	Severe: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, Slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, slope, wetness	Limitation: rooting depth, slope, wetness

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	Pond Reservoir areas	Embankments ,Dikes, and Levees	Aquifer-fed Excavated Ponds	Drainage	Irrigation	Terraces and Diversions	Grassed Waterways
HvB HOWLAND	Moderate: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, wetness	Limitation: rooting depth, wetness
HvC HOWLAND	Severe: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, slope, wetness	Limitation: rooting depth, slope, wetness
LnB LINNEUS	Moderate: depth to rock, seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock	Limitation: depth to rock
LnC LINNEUS	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope
LnD LINNEUS	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope
MaA MACHIAS	Severe: seepage	Severe: seepage, wetness	Severe: cutbanks cave	Limitation: cutbanks cave	Limitation: droughty, wetness	Limitation: large stones, wetness	Limitation: droughty, large stones
MaB MACHIAS	Severe: seepage	Severe: seepage, wetness	Severe: cutbanks cave	Limitation: cutbanks cave, slope	Limitation: droughty, slope, wetness	Limitation: large stones, wetness	Limitation: droughty, large stones

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	Pond Reservoir areas	Embankments ,Dikes, and Levees	Aquifer-fed Excavated Ponds	Drainage	Irrigation	Terraces and Diversions	Grassed Waterways
MaC MACHIAS	Severe: seepage, slope	Severe: seepage, wetness	Severe: cutbanks cave	Limitation: cutbanks cave, slope	Limitation: droughty, slope, wetness	Limitation: large stones, slope, wetness	Limitation: droughty, large stones, slope
Md MADE LAND	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable	Limitation: variable
MhB MAPLETON	Severe: depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock	Limitation: depth to rock
MhC MAPLETON	Severe: depth to rock, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope
MhD MAPLETON	Severe: depth to rock, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope
MmC MAPLETON	Severe: depth to rock	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock	Limitation: depth to rock
MmD MAPLETON	Severe: depth to rock, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: depth to rock, slope	Limitation: depth to rock, slope	Limitation: depth to rock, slope

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	Pond Reservoir areas	Embankments ,Dikes, and Levees	Aquifer-fed Excavated Ponds	Drainage	Irrigation	Terraces and Diversions	Grassed Waterways
Mn MIXED ALLUVIAL LAND PD	Moderate: seepage	Severe: piping, wetness	Severe: cutbanks cave	Limitation: cutbanks cave, flooding, frost action	Limitation: flooding, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, wetness
MIXED ALLUVIAL LAND VPD	Moderate: seepage	Severe: piping, ponding	Severe: cutbanks cave	Limitation: flooding, frost action, ponding	Limitation: flooding, ponding	Limitation: erodes easily, ponding	Limitation: erodes easily, wetness
MoA MONARDA	Slight:	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly	Limitation: wetness	Limitation: percs slowly, wetness	Limitation: wetness
BURNHAM	Slight:	Severe: piping, ponding	Severe: slow refill	Limitation: frost action, percs slowly, ponding	Limitation: percs slowly, ponding, rooting depth	Limitation: percs slowly, ponding	Limitation: percs slowly, rooting depth, wetness
MoB MONARDA	Moderate: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: slope, wetness	Limitation: percs slowly, wetness	Limitation: wetness
BURNHAM	Slight:	Severe: piping, ponding	Severe: slow refill	Limitation: frost action, percs slowly, ponding	Limitation: percs slowly, ponding, rooting depth	Limitation: percs slowly, ponding	Limitation: percs slowly, rooting depth, wetness
MrB MONARDA	Moderate: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, Slope	Limitation: slope, wetness	Limitation: percs slowly, wetness	Limitation: wetness

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MrB BURNHAM	Slight:	Severe: piping, ponding	Severe: slow refill	Limitation: frost action, percs slowly, ponding	Limitation: percs slowly, ponding, rooting depth	Limitation: percs slowly, ponding	Limitation: rooting depth, wetness
Pa PEAT	Severe: seepage	Severe: excess humus, wetness	Slight:	Limitation: frost action	Limitation: wetness	Limitation: wetness	Limitation: wetness
 MUCK	Severe: seepage	Severe: piping, wetness	Severe: slow refill	Limitation: frost action	Limitation: wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, wetness
PeA PERHAM	Moderate: seepage	Moderate: piping, wetness	Severe: no water	Limitation: percs slowly	Limitation: percs slowly, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, rooting depth
PeB PERHAM	Moderate: seepage, slope	Moderate: piping, wetness	Severe: no water	Limitation: percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily, rooting depth
PeC PERHAM	Severe: slope	Moderate: piping, wetness	Severe: no water	Limitation: percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, slope, wetness	Limitation: erodes easily, rooting depth, slope
PeD PERHAM	Severe: slope	Moderate: piping, wetness	Severe: no water	Limitation: percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: erodes easily, slope, wetness	Limitation: erodes easily, rooting depth, Slope

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PgB PLAISTED	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly	Limitation: percs slowly, rooting depth
PgC PLAISTED	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
PgD PLAISTED	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
PrB PLAISTED	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly	Limitation: percs slowly, rooting depth
PrC PLAISTED	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
PrD PLAISTED	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
PrE PLAISTED	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope

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PvB PLAISTED	Moderate: seepage, slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly	Limitation: percs slowly, rooting depth
 HOWLAND	Moderate: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, wetness	Limitation: rooting depth, wetness
PvC PLAISTED	Severe: slope	Severe: piping	Severe: no water	Limitation: deep to water	Limitation: percs slowly, rooting depth, slope	Limitation: percs slowly, slope	Limitation: percs slowly, rooting depth, slope
 HOWLAND	Severe: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, slope, wetness	Limitation: rooting depth, slope, wetness
RaA RED HOOK	Moderate: seepage	Severe: piping, seepage, wetness	Severe: slow refill	Limitation: frost action	Limitation: wetness	Limitation: wetness	Limitation: wetness
 ATHERTON	Severe: seepage	Severe: piping, ponding	Moderate: slow refill	Limitation: frost action, ponding	Limitation: ponding	Limitation: erodes easily, ponding	Limitation: erodes easily, wetness
RaB RED HOOK	Moderate: seepage, slope	Severe: piping, seepage, Wetness	Severe: slow refill	Limitation: frost action, slope	Limitation: slope, wetness	Limitation: wetness	Limitation: wetness

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RaB ATHERTON	Severe: seepage	Severe: piping, ponding	Moderate: slow refill	Limitation: frost action, ponding	Limitation: ponding	Limitation: erodes easily, ponding	Limitation: erodes easily, wetness
SgA STETSON	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty	Limitation: large stones, too sandy	Limitation: droughty, large stones
SgB STETSON	Severe: seepage	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, slope	Limitation: large stones, too sandy	Limitation: droughty, large stones
ThB THORNDIKE	Severe: depth to rock	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock, large stones, slope	Limitation: depth to rock, large stones	Limitation: depth to rock, large stones
ThC THORNDIKE	Severe: depth to rock, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock, large stones, slope	Limitation: depth to rock, large stones, slope	Limitation: depth to rock, large stones, slope
ThD THORNDIKE	Severe: depth to rock, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock, large stones, slope	Limitation: depth to rock, large stones, slope	Limitation: depth to rock, large stones, slope
ThE THORNDIKE	Severe: depth to rock, slope	Severe: seepage	Severe: no water	Limitation: deep to water	Limitation: depth to rock, large stones, slope	Limitation: depth to rock, large stones, slope	Limitation: depth to rock, large stones, slope

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TkB THORNDIKE	Severe: depth to rock	Severe: large stones, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, large stones, slope	Limitation: depth to rock, large stones	Limitation: droughty, large stones
TkC THORNDIKE	Severe: depth to rock, slope	Severe: large stones, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, large stones, slope	Limitation: depth to rock, large stones, slope	Limitation: droughty, large stones, slope
TkD THORNDIKE	Severe: depth to rock, slope	Severe: large stones, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, large stones, slope	Limitation: depth to rock, large stones, slope	Limitation: droughty, large stones, slope
TkE THORNDIKE	Severe: depth to rock, slope	Severe: large stones, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, large stones, slope	Limitation: depth to rock, large stones, slope	Limitation: droughty, large stones, slope
TsB THORNDIKE	Severe: depth to rock	Severe: large stones, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, large stones, slope	Limitation: depth to rock, large stones	Limitation: droughty, large stones
HOWLAND	Moderate: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, wetness	Limitation: rooting depth, wetness
TsC THORNDIKE	Severe: depth to rock, slope	Severe: large stones, seepage	Severe: no water	Limitation: deep to water	Limitation: droughty, large stones, slope	Limitation: depth to rock, large stones, slope	Limitation: droughty, large stones, slope

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TsC HOWLAND	Severe: slope	Severe: piping, wetness	Severe: no water	Limitation: frost action, percs slowly, slope	Limitation: percs slowly, slope, wetness	Limitation: percs slowly, slope, wetness	Limitation: rooting depth, slope, wetness
Wn WINOOSKI	Moderate: seepage	Severe: piping, wetness	Severe: cutbanks cave	Limitation: cutbanks cave, flooding, frost action	Limitation: flooding, wetness	Limitation: erodes easily, wetness	Limitation: erodes easily